WHAT IS CLAIMED IS:

1. A sheet feeding device in which sheets contained in sheet containing means detachably attached to an apparatus main body are fed by sheet feeding means, said sheet feeding device comprising:

a sheet support member provided in the sheet containing means and adapted to vertically move while supporting the sheets;

lifter means for raising and lowering said sheet support member;

a cam member adapted to lower the sheet feeding means so as to bring it into contact with the sheets when the sheets supported by said sheet support member are to be sent out and to raise the sheet feeding means to an upper initial position above the sheets on standby;

detection means for detecting a height of an uppermost surface of the sheets according to a position at which the sheet feeding means abuts against the sheets; and

control means for controlling the raising and lowering operations of said lifter means on the basis of the result of the detection of the height of the uppermost surface of the sheets as obtained by the detection means to maintain the uppermost surface of the sheets supported by the sheet support member at a predetermined height,

wherein, when the sheet containing means is accommodated in the apparatus main body, raising operation of said cam member is canceled by the sheet containing means, and the sheet feeding means is lowered from the initial position to enable said detection means to perform detection.

2. A sheet feeding device according to Claim 1, further comprising a canceling member to be pressurized by the sheet containing means when the sheet containing means is accommodated in the apparatus main body, wherein retention of the sheet feeding means is canceled by rotating said cam member holding the sheet feeding means to the initial position by said canceling member.

3. A sheet feeding device according to Claim 2, wherein said canceling member returns to a position where pressurization by the sheet containing means is possible upon drawing of the sheet containing means from the apparatus main body.

4. A sheet feeding device according to Claim 3, wherein said cam member is equipped with a pressurization portion to be pressurized by said canceling member, and wherein the pressurization portion does not prevent said canceling member from

returning to the position where it is pressurized by the sheet containing means accommodated.

5. A sheet feeding device according to Claim 1, wherein said cam member is provided coaxially with a partially-toothless gear forming a one-revolution control clutch, and wherein said cam member and said partially-toothless gear are mounted so as to provide a relative rotation within a predetermined angle range.

6. A sheet feeding device according to Claim 5, wherein the sheet feeding means is controlled in its rotation by said one-revolution control clutch, and wherein each time the sheet feeding means sends out one of the sheets through rotation transmitted by said one-revolution control clutch, said cam member causes the sheet feeding means to move between the initial position and the feeding position in which the sheet feeding means abuts against the sheets.

7. A sheet feeding device in which sheets contained in a sheet feeding cassette detachably attached to an apparatus main body are fed by a pick-up roller, said sheet feeding device comprising:

a holder for supporting the pick-up roller so as to allow the pick-up roller to swing vertically;

an inner plate which is rotatably provided in the sheet feeding cassette and on which sheets are stacked;

a push-up plate provided in the apparatus main body and adapted to push up said inner plate by rotating;

a cam member having an outer circumferential portion adapted to abut against an abutment portion provided on said holder to raise the pick-up roller to a position above the sheet feeding cassette, and a linear portion adapted to lower the pick-up roller so as to bring the pick-up roller into contact with the uppermost surface of the sheets stacked on said inner plate;

a position detection sensor adapted to detect whether the position in which the pick-up roller abuts against the sheets is set at a predetermined position on the basis of whether a flag provided on said holder is detected;

control means for controlling the pushing-up operation of said push-up plate on the basis of the detection by said position detection sensor; and

a lever adapted to rotate said cam member to cause the portion of said cam member against which said holder abuts to shift from the outer circumferential portion to the linear portion when the sheet feeding cassette is accommodated in the

apparatus main body.

8. A sheet feeding device according to Claim 7, further comprising separation means for separating from each other the sheets sent out from the sheet feeding cassette by the pick-up roller, wherein said separation means has a feed roller adapted to rotate in a direction in which the sheets are fed and a retard roller provided so as to be brought into pressure contact with said feed roller and adapted to rotate in a direction opposite to the direction in which the sheets are fed.

9. An image forming apparatus comprising:

image forming means for forming images on sheets;

sheet containing means detachably attached to an apparatus main body and adapted to contain sheets to be supplied to said image forming means;

sheet feeding means for feeding the sheets contained in said sheet containing means;

a sheet support member provided in said sheet containing means and movable up and down while supporting the sheets;

lifter means for raising and lowering said sheet support member;

a cam member adapted to lower said sheet

feeding means so as to bring said sheet feeding means into contact with the sheets when the sheets supported by said sheet support member are sent out and to raise said sheet feeding means to an initial position above the sheets on standby;

detection means for detecting the height of the uppermost surface of the sheets according to the position in which said sheet feeding means abuts against the sheets; and

control means adapted to control the raising and lowering operations of said lifter means on the basis of the result of detection of the height of the uppermost surface of the sheets obtained by said detection means to maintain the height of the uppermost surface of the sheets supported by said sheet support member at a predetermined level,

wherein, when said sheet containing means is accommodated in said apparatus main body, the raising operation of said cam member is canceled by said sheet containing means, and said sheet feeding means is lowered from the initial position to enable said detection means to perform detection.

10. An image forming apparatus in which sheets contained in a sheet feeding cassette detachably attached to an apparatus main body are fed to an image forming portion by a pick-up roller, said image

forming apparatus comprising:

a holder supporting the pick-up roller so as to allow the pick-up roller to swing vertically;

an inner plate which is rotatably provided in the sheet feeding cassette and on which sheets are stacked;

a push-up plate provided in the apparatus main body and adapted to push up said inner plate by rotating;

a cam member having an outer circumferential portion adapted to abut against an abutment portion provided on said holder to raise the pick-up roller to a position above the sheet feeding cassette, and a linear portion adapted to lower the pick-up roller so as to bring the pick-up roller into contact with the uppermost surface of the sheets stacked on said inner plate;

a position detection sensor adapted to detect whether the position in which the pick-up roller abuts against the sheets is set at a predetermined position on the basis of whether a flag provided on said holder is detected;

control means for controlling the pushing-up operation of said push-up plate on the basis of the detection by said position detection sensor; and

a lever adapted to rotate said cam member to cause the portion of said cam member against which

said holder abuts to shift from the outer circumferential portion to the linear portion when the sheet feeding cassette is accommodated in the apparatus main body.